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(54) Title: USE OF COX-2 INHIBITOR TO PREVENT T-CELL ANERGY INDUCED BY DENDRITIC CELL THERAPY

(57) Abstract: The present invention relates to a method and combination therapy useful in the treatment of cancer. More specifi-  
cally, the invention relates to the use of COX-2 inhibitors in combination with a therapeutic dendritic cell vaccine for treating cancer.  
The COX-2 inhibitors of the present invention are believed to inhibit the enzymatic activity of prostaglandinE<sub>2</sub> (PGE<sub>2</sub>); thereby  
preventing COX-2 overexpressing tumors from evading immune surveillance by antigen-specific cytotoxic T lymphocytes (CTLs).  
COX-2 inhibitors are believed to suppress PGE<sub>2</sub> that COX-2 overexpressing glioma produce, allowing tumor-infiltrating DCs to  
polarize Th cells toward Th-subset-1 (Th1).



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